**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~A~~ An *in vitro* method for selective electrofusion of at least two fusion partners having cell-like membranes, comprising:

A) bringing into contact the fusion partners;

B) providing an electric field using at least one microelectrode, which is of a strength sufficient to obtain fusion and highly focused on the fusion partners, wherein said at least one microelectrode is positioned by use of a microscope, at least one micropositioner and/or a stereotactic device, wherein at least one microelectrode is hollow, and sufficiently small to permit the selective fusion of two fusion partners.

2. (Original) A method according to claim 1, wherein only one microelectrode, sufficiently small to permit the selective fusion of two fusion partners, is used to provide the electrical field in step B.

3. (Original) A method according to claim 1, wherein two microelectrodes, sufficiently small to permit the selective fusion of two fusion partners, are used to provide the electrical field in step B.

4. (Previously Presented) A method according to claim 1, wherein one electrode movably mounted on a microchip is used to provide the electrical field in step B.

5. (Previously Presented) A method according to claim 1, wherein several electrodes movably mounted on a microchip are used to provide the electrical field in step B.

6. (Previously Presented) A method according to claim 4, wherein one electrode(s) is (are) movably mounted on a microchip of a suitable design for combinatorial synthesis of fusion products.

7. (Cancelled)

8. (Previously Presented) A method according to claim 2, wherein at least one microelectrode that is hollow, electrolyte-filled, and sufficiently small to permit the selective fusion of two fusion partners, is used to provide the electrical field in step B, and said microelectrode is also used to deliver fusion partners or chemical agents by electroendoosmosis, electrophoresis, or by Poiseuille flow.

9. (Previously Presented) A method according to claim 2, wherein the outer diameter of said electrode(s) is sufficiently small to permit the selective fusion of said at least two fusion partners without affecting nearby structures, such as cells, liposomes, and proteoliposomes.

10. (Original) A method according to claim 9, wherein the outer diameter of said electrode(s) is 1-100 μm.

11. (Previously Presented) A method according to claim 2, wherein at least one electrode is used, for delivery of at least one fusion partner to the fusion site.

12. (Previously Presented) A method according to claim 2, wherein step A is performed by use of the electrodes.

13. (Previously Presented) A method according to claim 1, wherein step A is performed by use of optical trapping.

14. (Previously Presented) A method according to claim 1, wherein step A is performed by use of micropipettes.

15. (Previously Presented) A method according to claim 1, wherein at least one of the fusion partners is a cell, and the other fusion partner(s) independently is (are) selected from

the group consisting of a single cell, a liposome, a proteoliposome, a synthetic vesicle, an egg cell, an enucleated egg cell, a sperm cell at any development stage and a plant protoplast.

16. (Previously Presented) A method according to claim 1, wherein at least one of the fusion partners is constituted by a multiple of a structure selected from the group consisting of a single cell, a liposome, a proteoliposome, a synthetic vesicle, an egg cell, an enucleated egg cell, a sperm cell at any development stage and a plant protoplast.

17. (Previously Presented) A method according to claim 1, wherein the fusion partners are provided in a buffer prior to step B.

18. (Previously Presented) A method according to claim 1, wherein at least one of the fusion partners has been immobilized prior to step A.

19. (Previously Presented) A method according to claim 1, wherein one of the fusion partners is part of a cellular network.

20. (Previously Presented) A method according to claim 1, wherein at least one of the fusion partners has been electroporated in a buffer prior to step A.

21. (Previously Presented) A method according to claim 1, wherein at least one of the fusion partners has been exposed to a dielectrophoretic field in a buffer prior to step A.

22. (Previously Presented) A method according to claim 1, wherein at least one of the fusion partners has been treated by a fusogenic or other agent that promotes close cell-cell contacts.

23. (Cancelled)

24. (Cancelled)

25. (Previously Presented) A method for creation of hybridomas comprising using the method according to claim 1.

26. (Previously Presented) A method for manipulation of the composition of a cellular membrane comprising using the method according to claim 1.

27. (Previously Presented) A method for the delivery of a well-defined volume of a substance to a cell comprising using the method according to claim 1.

28. (Previously Presented) A method for the delivery of a pharmaceutically active substance to a cell comprising using the method according to claim 1.

29. (Previously Presented) A method for the treatment of a tumor comprising using the method according to claim 1.

30. (Cancelled)

31. (Previously Presented) A method according to claim 2, wherein one electrode movably mounted on a microchip is used to provide the electrical field in step B.

32. (Previously Presented) A method according to claim 3, wherein several electrodes movably mounted on a microchip are used to provide the electrical field in step B.

33. (Previously Presented) A method according to claim 5, wherein one electrode(s) is (are) movably mounted on a microchip of a suitable design for combinatorial synthesis of fusion products.

34. (Cancelled)

35. (New) The method of claim 1, wherein the *in vitro* method is an *ex vivo* procedure.